

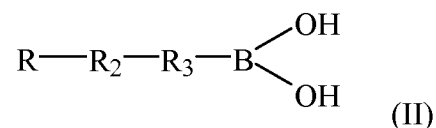
**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims**

1-11. (Canceled)

12. (Previously Presented) An analyte detector comprising:  
a field effect transistor having a gate surface; and  
a monolayer of molecules, each molecule bonded to the gate surface, the molecules having a structure (II):



wherein,

R is a ligand bonded to the gate surface;

R<sub>2</sub> is a (C<sub>10</sub> – C<sub>24</sub>) alkylene, or (C<sub>10</sub> – C<sub>24</sub>) alkenylene; and

R<sub>3</sub> is an (C<sub>3</sub> – C<sub>14</sub>) cycloalkylene, (C<sub>3</sub> – C<sub>14</sub>) heterocyclylene, (C<sub>3</sub> – C<sub>24</sub>) arylene, or (C<sub>3</sub> – C<sub>14</sub>) heteroarylene.

13. (Original) The analyte detector according to claim 11, wherein R<sub>2</sub> is a (C<sub>10</sub> – C<sub>20</sub>) alkylene.

14. (Original) The analyte detector according to claim 11, wherein R<sub>3</sub> is a phenylene or naphthalene.

15. (Original) The analyte detector according to claim 11, wherein the ligand is thiol, phosphate, or siloxane.

16. (Original) The analyte detector according to claim 11, wherein the gate surface is a conducting surface.

17. (Original) The analyte detector according to claim 11, wherein the gate surface is a non-continuous conducting surface of the field effect transistor, and the monolayer of molecules form a non-conducting layer on the semi-conducting surface.

18. (Original) The analyte detector according to claim 11, wherein the gate surface is an insulating surface.

19-34. (Canceled)